

## **System and Method for Managing a Register-Based Stack of Operand Tags**

### **ABSTRACT**

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A virtual machine in a processing system manages type information for operands. In one embodiment, the virtual machine accomplishes the following results through execution of a single instruction: adding an operand tag to a tag stack, and updating a stack pointer for the tag stack to recognize the addition of  
10 the operand tag to the tag stack. The single instruction may be a shift instruction, for example. The tag stack may reside in a tag stack register, and each operand tag may indicate whether a corresponding operand on an operand stack is to be treated as a reference operand or a non-reference operand. Other embodiments are described and claimed.

15